

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: STREETWORKS

Report Number: P198721

Luminaire Tested: **XNV2-AF-02-LED-U-SL3-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198721  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24262)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: XNV2-AF-02-LED-U-SL3-1200  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13515.2 lumens  
Efficiency: N/A  
Efficacy: 105.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B2 - U0 - G3

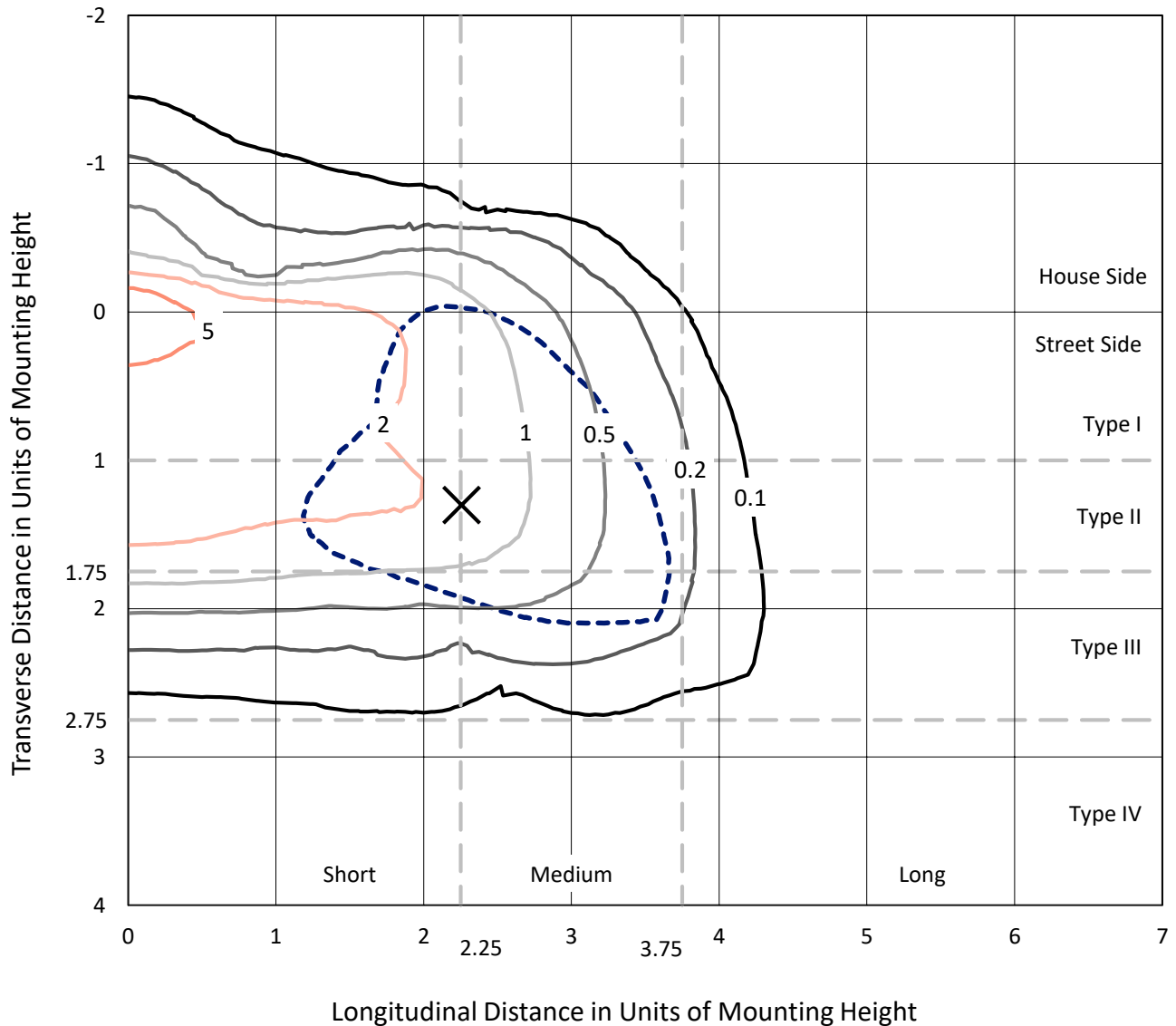
Input Watts (W): 128  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

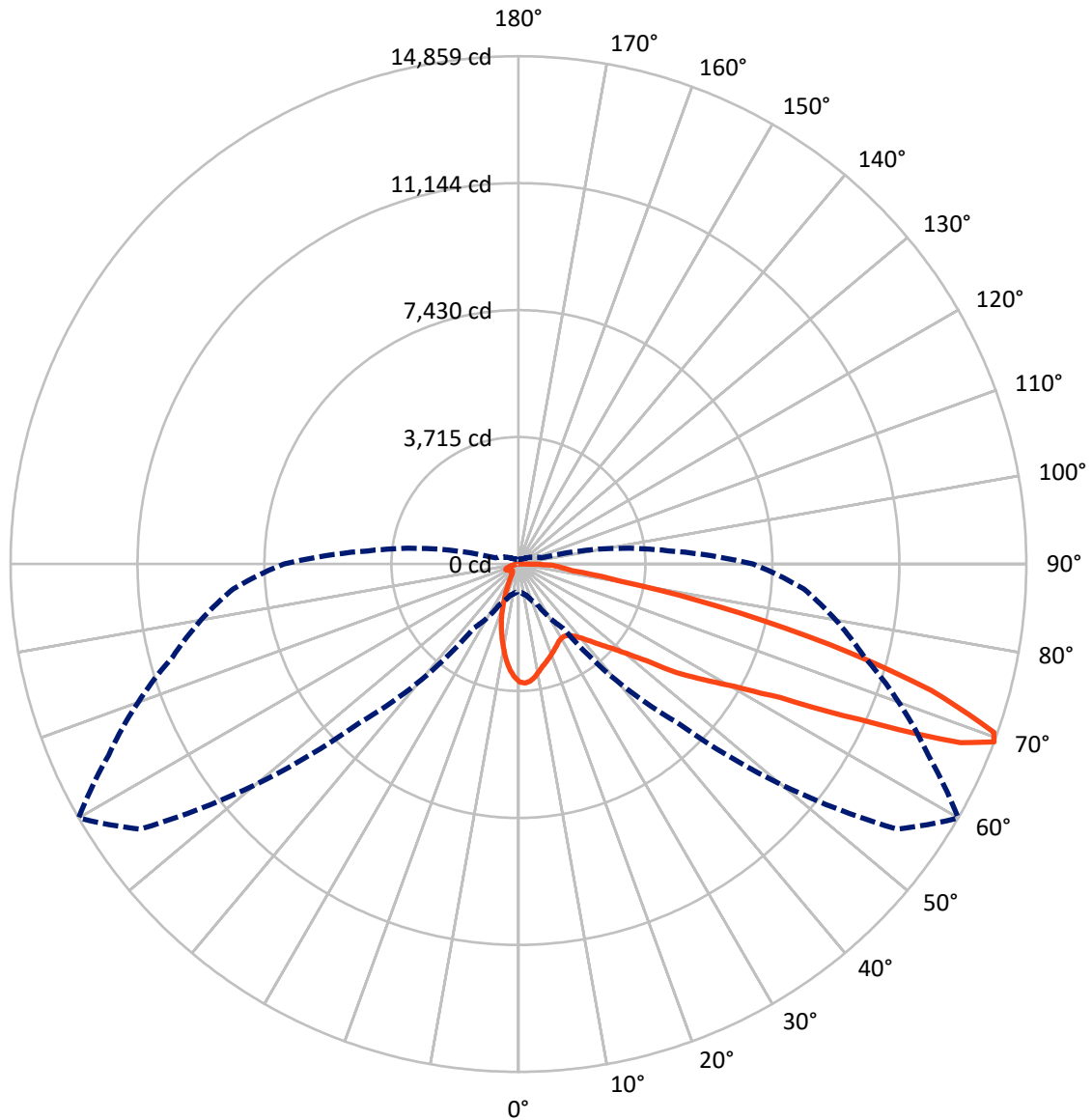
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 8.6 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1927.7	0.0	1927.7
	% Fixture	14.3	0.0	14.3
<b>Street Side</b>	Lumens	11587.5	0.0	11587.5
	% Fixture	85.7	0.0	85.7
<b>Total</b>	Lumens	13515.2	0.0	13515.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	292.5	2.2
10°-20°	626.4	4.6
20°-30°	799.1	5.9
30°-40°	1099.6	8.1
40°-50°	1781.1	13.2
50°-60°	2795.4	20.7
60°-70°	3726.7	27.6
70°-80°	2072.9	15.3
80°-90°	321.5	2.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	13515.2	100.0
0°-180°	13515.2	100.0

**Coefficient of Utilization**



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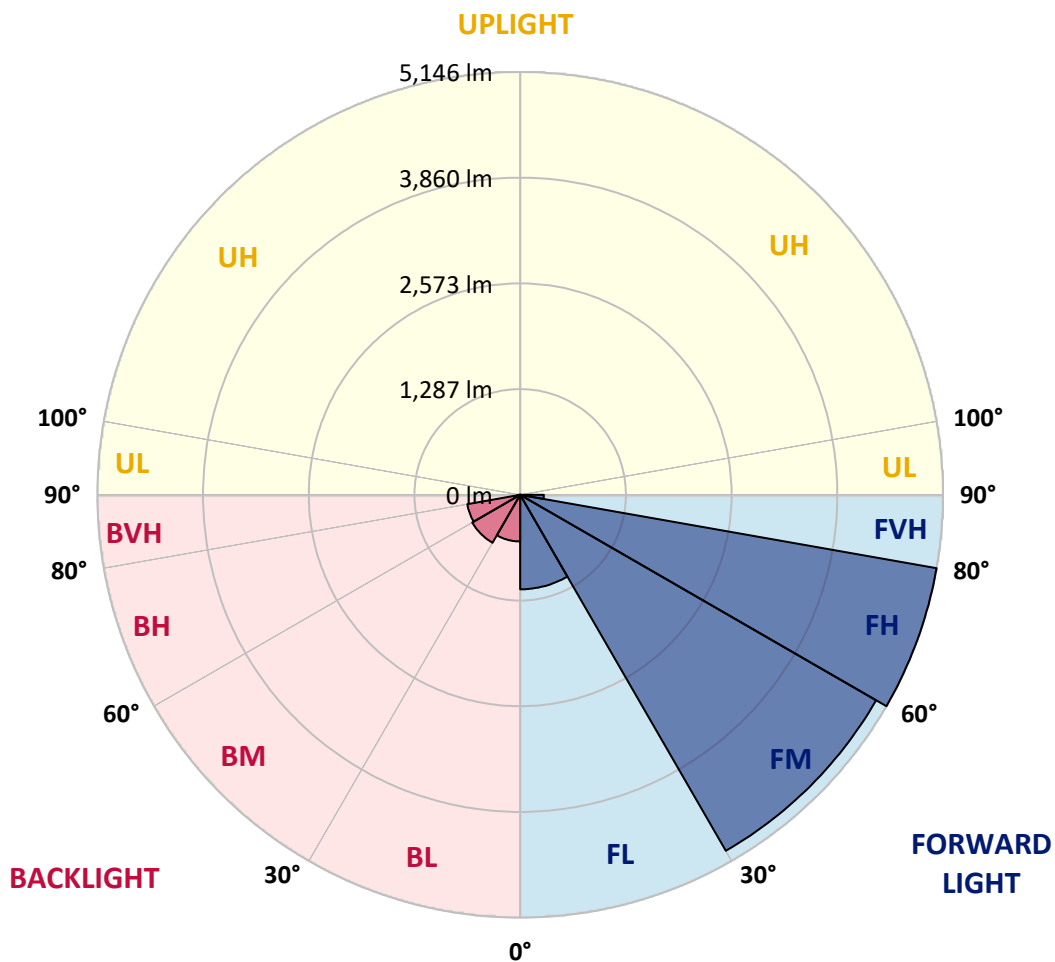
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1149.9	8.5			
FM	(30°-60°)	5002.6	37.0			
FH	(60°-80°)	5146.1	38.1			G3/7500
FVH	(80°-90°)	288.9	2.1			G3/500
BL	(0°-30°)	568.1	4.2	B2/1000		
BM	(30°-60°)	673.4	5.0	B1/1000		
BH	(60°-80°)	653.6	4.8	B2/1000		G2/1000
BVH	(80°-90°)	32.6	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	3448.5	3448.5	3448.5	3448.5	3448.5	3448.5	3448.5	3448.5	3448.5	3448.5	3448.5
2.5°	3540.3	3549.8	3549.8	3542.1	3537.7	3512.6	3497.9	3487.4	3469.2	3435.5	3405.1
5°	3413.8	3432.0	3439.8	3443.3	3465.8	3458.0	3458.9	3451.9	3436.3	3399.9	3350.5
7.5°	3181.5	3185.0	3198.9	3222.3	3276.8	3315.0	3346.2	3352.2	3348.8	3321.9	3252.6
10°	2952.7	2958.8	2975.3	3015.1	3067.1	3121.7	3189.4	3217.1	3237.8	3229.1	3141.7
12.5°	2762.9	2763.8	2782.0	2827.9	2885.9	2954.5	3046.3	3089.6	3139.0	3159.0	3061.1
15°	2580.1	2592.2	2609.5	2665.0	2736.9	2823.5	2929.3	2989.2	3054.1	3111.3	2998.7
17.5°	2441.4	2450.9	2461.3	2507.3	2590.4	2698.7	2829.7	2893.8	2979.5	3067.1	2934.5
20°	2365.2	2368.5	2360.8	2383.4	2453.5	2570.6	2722.2	2799.3	2901.6	3024.7	2868.7
22.5°	2349.5	2349.5	2321.0	2316.6	2347.8	2446.6	2611.3	2705.7	2830.5	2995.2	2809.7
25°	2422.3	2417.1	2363.4	2314.0	2302.8	2353.0	2505.5	2621.6	2769.8	2994.3	2765.5
27.5°	2560.1	2553.2	2486.5	2403.2	2331.3	2309.6	2424.1	2542.7	2722.2	3023.7	2742.9
30°	2731.7	2729.1	2661.5	2557.5	2438.8	2327.0	2392.0	2502.0	2690.2	3078.4	2742.1
32.5°	2919.8	2907.6	2866.1	2762.1	2607.8	2423.2	2411.1	2503.8	2681.5	3158.2	2762.1
35°	3120.0	3111.3	3100.9	2996.0	2822.7	2593.1	2495.1	2563.6	2723.9	3269.0	2818.4
37.5°	3374.8	3365.3	3382.6	3268.2	3078.4	2815.8	2637.3	2683.2	2810.6	3430.3	2923.3
40°	3828.1	3800.4	3751.8	3575.8	3376.6	3088.8	2842.7	2849.6	2958.8	3646.0	3091.4
42.5°	4572.5	4483.3	4243.2	3919.9	3691.1	3406.0	3110.5	3077.5	3163.3	3931.2	3335.7
45°	5318.7	5218.2	4812.6	4295.2	4017.0	3746.6	3441.5	3362.6	3418.1	4263.1	3650.4
47.5°	5800.5	5751.1	5293.6	4670.5	4358.5	4117.5	3820.2	3690.3	3730.1	4639.3	4038.6
50°	5941.8	5899.4	5539.7	4964.3	4680.8	4565.5	4289.1	4116.7	4123.6	5078.6	4504.1
52.5°	5836.1	5818.7	5580.4	5146.3	4977.3	5037.9	4938.3	4698.2	4641.0	5560.6	5008.5
55°	5694.9	5700.9	5609.0	5329.1	5278.8	5478.2	5787.5	5594.3	5351.7	6062.3	5533.7
57.5°	5250.3	5254.6	5495.5	5677.5	5854.3	6095.3	6448.9	6367.4	6084.8	6604.0	6122.2
60°	4227.5	4261.4	4797.8	5605.6	6512.1	7311.1	7397.9	7257.4	6864.8	7228.0	6887.3
62.5°	3020.4	3050.6	3672.1	4866.3	6435.0	8687.4	9150.2	8592.1	7923.1	8161.4	7963.8
65°	1586.9	1581.7	2062.7	3362.6	5420.1	9006.4	11911.4	10961.5	9705.8	9444.9	9003.8
67.5°	886.6	915.2	1101.5	1696.1	3532.6	7926.5	13675.1	13955.0	12184.4	10463.3	8958.7
69°	819.9	829.4	954.2	1311.2	2302.8	6539.8	13523.4	14859.0	13229.6	10467.5	8381.5
70°	796.5	806.9	920.3	1208.1	1934.4	5358.6	12971.3	14753.2	13483.5	10235.3	7856.3
72.5°	714.1	728.0	838.1	1086.0	1630.2	2762.1	10448.5	12627.3	12213.9	8945.7	6091.8
75°	609.3	632.7	799.0	1078.1	1544.3	1755.9	6967.9	9407.7	9090.5	6397.7	3456.2
77.5°	252.2	254.8	349.2	789.5	1620.7	1680.5	3744.8	5959.2	5275.4	2805.3	1040.9
80°	175.9	172.5	174.2	230.6	1307.8	1691.8	1921.4	3030.7	2355.5	740.1	487.0
82.5°	148.2	146.5	153.4	144.7	442.8	1919.7	1606.7	1579.9	1109.3	398.6	232.3
85°	97.9	95.3	125.6	131.8	210.6	1524.5	1728.2	1242.0	826.7	213.2	98.8
87.5°	47.7	48.5	71.9	89.3	111.8	482.7	1655.3	981.9	638.7	92.8	39.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3448.5	3448.5	3448.5	3448.5	3448.5	3448.5	3448.5	3448.5	3448.5	3448.5	3448.5
2.5°	3393.0	3366.9	3343.6	3314.2	3291.5	3272.5	3246.5	3245.6	3241.3	3247.4	3249.1
5°	3317.6	3274.3	3208.4	3134.7	3082.8	3014.2	2947.5	2925.0	2899.9	2897.3	2905.1
7.5°	3204.1	3136.5	3023.7	2911.1	2798.5	2683.2	2573.9	2518.5	2464.8	2448.3	2456.1
10°	3077.5	2991.7	2819.3	2635.5	2477.0	2305.3	2138.9	2031.5	1933.5	1891.9	1902.3
12.5°	2978.7	2869.5	2626.8	2388.5	2151.1	1904.9	1685.6	1473.4	1313.0	1241.0	1245.4
15°	2893.8	2754.3	2446.6	2129.4	1832.1	1495.0	1190.8	944.7	804.2	752.3	750.5
17.5°	2802.0	2633.0	2258.6	1888.5	1502.8	1086.0	797.3	651.7	596.3	578.9	578.9
20°	2704.0	2508.2	2061.8	1625.9	1156.1	758.3	599.8	543.4	522.6	517.4	516.5
22.5°	2613.0	2385.9	1864.2	1345.9	836.4	575.5	510.5	488.8	485.3	489.7	489.7
25°	2541.0	2278.4	1664.0	1051.3	608.3	481.9	454.1	451.5	464.5	480.2	482.7
27.5°	2487.3	2182.3	1466.4	767.8	478.4	419.5	409.9	421.1	451.5	482.7	488.8
30°	2450.1	2099.9	1229.8	552.1	398.6	367.4	371.8	391.7	437.6	485.3	498.4
32.5°	2433.6	2033.2	991.4	423.8	340.6	323.3	334.5	360.5	408.2	455.8	471.5
35°	2449.1	1984.6	771.3	351.9	298.1	285.1	298.1	325.0	356.2	379.6	389.1
37.5°	2505.5	1967.3	580.6	312.0	270.4	257.4	267.8	286.0	299.8	308.5	312.8
40°	2624.3	1985.5	455.0	291.2	254.8	240.1	242.6	251.3	260.9	267.8	268.6
42.5°	2813.2	2045.3	404.8	283.4	245.3	226.2	221.9	227.9	238.3	247.9	249.6
45°	3064.6	2145.0	399.6	286.0	240.9	214.9	206.2	212.4	226.2	241.8	244.4
47.5°	3389.5	2302.8	423.8	299.8	243.6	208.9	195.9	201.9	220.1	240.9	244.4
50°	3774.3	2521.2	468.8	320.7	255.6	208.9	191.5	196.7	215.8	239.2	242.6
52.5°	4227.5	2825.3	515.7	341.5	273.0	216.7	193.2	192.4	209.7	231.4	235.7
55°	4727.7	3203.2	560.8	359.7	282.5	227.1	197.6	187.2	201.1	218.4	221.9
57.5°	5316.1	3720.6	639.5	377.0	287.8	234.9	202.7	182.0	189.8	201.9	204.5
60°	6114.3	4480.6	793.0	406.4	297.3	238.3	203.7	176.8	175.9	184.6	185.5
62.5°	7155.1	5370.7	939.5	441.1	316.3	239.2	200.2	173.3	164.7	167.3	167.3
65°	7895.3	5698.3	897.0	470.6	333.7	238.3	196.7	170.7	156.0	151.7	151.7
67.5°	7474.1	5033.5	761.8	478.4	335.4	228.8	188.9	164.7	148.2	137.8	137.8
69°	6855.3	4412.2	699.4	464.5	321.5	217.6	180.2	158.6	143.0	130.8	130.8
70°	6350.9	3941.6	661.2	448.1	305.0	208.0	172.5	152.5	137.8	127.4	126.5
72.5°	4741.5	2630.3	565.1	386.6	250.4	175.9	150.8	136.1	124.0	117.0	117.0
75°	2502.0	1318.2	462.8	315.5	193.2	140.3	124.0	114.4	107.5	106.6	105.8
77.5°	819.9	596.3	332.8	237.4	142.1	109.1	98.8	92.8	91.9	95.3	95.3
80°	442.8	356.2	214.1	160.3	98.8	81.4	76.3	75.4	77.9	83.2	83.2
82.5°	214.9	175.9	127.4	98.8	67.6	59.8	59.8	60.7	64.1	70.2	70.2
85°	92.8	83.2	73.7	55.4	41.6	37.2	42.5	46.7	49.4	53.7	55.4
87.5°	44.2	39.0	33.8	21.7	18.2	19.0	22.5	27.7	32.9	36.4	37.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)